received striking confirmation from the more recent work of Baer, Opie, Müller, and Koltzschmann.

The protein constituent of the serum with which the antiautolytic body is probably in combination is still a matter of dispute, the old view that it is in combination with englobulin having been recently revived. I am at present endeavouring to have the antiautolytic protein body separated from the auxilytic globulin of the serum, but at present the difficulties of obtaining it in a sterile and atoxic condition are considerable.

SUMMARY OF CASES TREATED BY NORMAL SERUM. Full details of these cases will be published later.

Cases Treated by Local Applications of Serum.

	Results.
9 cases of long-standing varicose ulcer ...	Vide below.
1 case of eczematous fissure	Rapid cure.
1 case of rectal fissure	Cure in 14 days.
1 case of intractable bedsores	Rapid healing.
2 cases of breaking-down carcinomata ...	Results doubtful.

Cases Treated by Internal Doses of Serum.

	Results.
5 cases of chronic gastric ulcer	Entire relief from pain in 4.
2 cases of acute gastric ulcer with hæmorrhage	Hæmorrhage arrested.
4 cases of tuberculous hæmoptysis	Hæmorrhage arrested.
1 case of acute pustular eczema... ..	Rapid cure.
2 cases of chronic duodenal ulcer with hæmorrhage	Relief of pain.
1 case of chronic duodenal ulcer with no hæmorrhage	Under treatment.

Cases Treated by both Methods Combined with Vaccines

	Results.
1 case of chronic alveolar suppuration ...	Under treatment.
1 case of acute pustular eczema... ..	Vide above.
1 case of suppurating rectal fissure	Cure in 14 days.

Cases Treated by Vaccines (by the Mouth) alone.

	Results.
1 case of tuberculous sacro-iliac disease ...	Practically cured.
1 case of acne	Doubtful benefit.

CASES OF ULCERATION TREATED WITH SERUM.

The cases of varicose ulcer were mainly treated at St. George's Infirmary, where the courtesy of Dr. Muir and his assistant, Dr. Austin, who spared no trouble in the carrying out of the treatment, enabled me to observe the action of the serum under conditions eliminating the possible errors arising from the effects of recent rest and treatment. In all 7 cases were treated there, and only one failed completely to react, whilst in another the process of complete healing of the ulcer was interfered with by a papillomatous growth. In all the other cases healing was promoted to a great extent. One case, in which an ulcer of about 3 sq. in. had been without any change for eight years, and the patient had been confined to bed for some months previously, was completely healed up in about three weeks. In another, where an ulcerative condition had existed for thirty years, and healing with subsequent breaking down had last taken place two years before, the lesion was nearly completely healed after four weeks' dressing with serum when I last saw it.

The case which resisted treatment was one of a very unpromising old callous ulcer, covered by an almost horny slough. As a rule, the treatment was followed by a beginning of new skin formation at the edges within a few

days from the first application of the serum dressing, the floor of the ulcer at the same time becoming healthy-looking and red. Two other cases at St. George's Hospital are at present being treated as out-patients and show improvement, notwithstanding the unfavourable conditions and a history of some months' unsuccessful treatment with various lotions.

With the ulcers I would include a case of severe bedsores under the care of Dr. Highet at Workington, where the application of serum led to rapid healing.

A case of eczematous fissure under the breast in a woman that had been treated unsuccessfully with zinc and antiseptic powders healed up after two days' local serum treatment.

Two cases of ulceration of malignant tumours were treated with doubtful benefit by serum.

It is necessary to dwell somewhat at length on the effects of serum on cutaneous ulcerations, as it affords an easily-observed demonstration of the inhibitory power of serum on what is generally admitted to be a purely autolytic lesion. The effect of serum on simple cutaneous ulceration was similar to the results of the treatment of gastric ulceration.

One case of undoubted gastric ulcer where the patient had suffered daily pain for nine years was relieved after two days' treatment, and said that this was the first time she had been able to lie on her left side at night since the onset. Serum was then omitted for five days and the pain returned, but again left her on resumption of the serum treatment, which was continued for three weeks. After this period she appeared to be completely cured.

The second case had a history of three years' symptoms of gastric ulcer with chronic pain. After five days' treatment she declared herself free from pain.

A case of duodenal ulcer is now under treatment with marked signs of improvement.

Early in 1907 I treated a case of tuberculous sacro-iliac disease by the administration of tuberculin by the mouth. I am at present treating a case of pyorrhoea alveolaris by the combined method. When treating cases of hæmoptysis with serum by the mouth in May, 1907, I observed, in addition to the satisfactory results on the hæmorrhage that I have recorded in my previous papers, that the treatment had a distinct inhibitory effect on the destructive process. This has induced me to undertake the treatment of a large number of other cases of tuberculosis in the hope of producing still more striking effects.

HYSTERECTOMY PERFORMED UPON A PATIENT WITH GLYCOSURIA.

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WHETHER a patient with persistent glycosuria should be subjected to an operation that is not immediately necessary to save life is a question open to debate, and therefore the following notes seem sufficiently interesting for publication.

A married woman, aged 42, and the mother of three children, the youngest aged 14, was admitted to the Samaritan Free Hospital in April, 1907. She had an abdominal tumour, concerning which she consulted Dr. C. J. Beattie, who investigated the case and at once sent the patient to the hospital.

History.

She had known of the tumour and been treated for it six years. It steadily enlarged and during the last three years the menstrual flow was increasingly free. The patient was emaciated and anaemic, and her weight had fallen nearly a stone and a half. In the summer of 1906 she suffered from diarrhoea, which ceased after a week in the country. Shortly before admission to hospital she had a "cold," with cough and slight expectoration, but she had not been subject to such attacks.

Condition on Admission.

There were many fibromyomata in the wall of the uterus. Most of them were small, but in two the diameter was about 4 in., whilst a third was nearly as big. The mass rose as high as the umbilicus, the bulk of it was above the pelvic brim and with the uterus it was very freely movable in the pelvis and abdomen.

The quantity of urine excreted in twenty-four hours was between 40 and 50 oz., and its specific gravity was 1038 to 1044.

On April 21st 41 oz. were passed containing 34.5 grains of sugar to the ounce.* The skin was moist, and there was no increase of appetite or unusual thirst. Under a modified diet the amount of sugar diminished, the lowest quantity before the operation being found on May 1st, when 40 oz. of urine were passed containing 28.2 grains of sugar to the ounce. In other respects the patient's health was good.

If there had been no glycosuria the case was one in which the uterus and tumours should be removed without hesitation, because the patient's health was seriously deteriorated by the repeated and profuse losses of blood, which there was no prospect of arresting, and because surgical treatment when the uterus is freely movable is almost without danger. At the time of writing there has been only one death in my last 61 cases of hysterectomy for fibromyoma, and I have never lost a patient from this operation when the conditions were at all near being so favourable as in the case under consideration.

Obviously, it was important to know whether the causes of the condition of the urine would have an ill-effect upon surgical treatment. In the opinion of some, and I think these constitute the majority, a persistent glycosuria is a very dangerous complication of any major operation. Others attach less importance to it, and we know that an operation for diabetic gangrene is not necessarily fatal. Moreover, in cases of obstruction of the pancreatic duct by gall stones or by inflammation of the ducts associated with glycosuria, the latter has been cured by removal of the stones and drainage of the gall bladder, which allowed pathological changes in the pancreas to subside.¹

The opinion I have formed is that, if the conditions are otherwise suitable for surgical treatment, a patient should not be denied its advantages because of the presence of sugar in the urine. I understand, however, that cases of this kind have been known to collapse suddenly during or soon after an operation, and it seems to me that septic infection may be unusually difficult to eliminate in a glycosuric patient and may prove rapidly fatal before characteristic symptoms of microbic action have time to develop. In deciding whether to operate or not, it must be taken into account that the causes of the glycosuria may lead to a fatal issue within a few years in young and middle-aged people.

The uncertainties of the position were explained as fully as possible to the patient, who is an intelligent woman, and she expressed a strong desire to have the tumours removed. As I thought her decision justified by the circumstances, I performed panhysterectomy on May 3rd, 1907.

Operation and After-History.

A mixture of one part of chloroform with two parts of ether was selected as the anæsthetic, and the operation was delayed twice by respiratory difficulties, which were alarming in view of the reputed danger of anæsthetics in the cases under consideration, but on both occasions artificial respiration with traction upon the tongue quickly restored the patient to a condition of safety.

In all other respects the operation and convalescence were uncomplicated from a surgical point of view, the highest temperature being 99.8° F., and the highest pulse-rate being 100 to the minute. Strength with an appearance of perfect health was quickly regained, and the patient's weight rose 8 lb. to 9 st. 9 lb. during the first four weeks after she left the hospital. In December her weight was 10 st. 1½ lb., the bowels acted well, there had been little pain of any kind, flushings were hardly noticed and there was complete freedom from headaches, which had caused much suffering before the operation.

Immediately after the tumours were removed, the patient was placed on a diet consisting chiefly of beef-tea and broths, and the quantity of sugar in the urine rapidly diminished until on the fourth day there was only a trace, but it did not disappear. When the patient showed every sign of doing well, a mixed diet was given, and the amount of sugar excreted varied with the kind of food. After a time a fairly strict diabetic diet was arranged, and in the last twenty-four hours of the patient's stay in hospital she passed 44 oz. of urine, which had a specific gravity of 1.013, and contained only 1.8 grains of sugar to the ounce. At a seaside convalescent home she was put on ordinary diet, or nearly so, and afterwards at her own house she seldom passed less than 3 pints of urine in twenty-four hours. On July 2nd this quantity contained 24 grains of sugar to the ounce. Under Dr. Beattie's care and under restricted diet, the amount went down to 2 grains to the ounce. In October the eating of one pear seemed to have a permanent unfavourable effect on the glycosuria. Dr. Beattie informs me that in January an attack of bronchitis almost proved fatal from cardiac weakness. The diet regulations were relaxed, and

* Whilst the patient was in hospital the amount of sugar was estimated at the Laboratories of Public Health. Later it was estimated at 1 grain per ounce for every point lowered in the specific gravity by fermentation.

the patient recovered. When convalescent, on January 24th, she passed 70 oz. of urine with a specific gravity of 1.036 and containing 30 grains of sugar to the ounce. On February 15th, the patient being again on restricted diet, 60 oz. of urine were passed, containing 28 grains of sugar to the ounce. The patient had recovered from the bronchitis. Recently the administration of codeina in ½ grain doses three times daily was followed by a reduction of the urine to 50 oz. in 24 hours, containing 10 grains of sugar to the ounce, but the improvement was not maintained, and on March 14th 75 oz. were passed containing 16 grains of sugar to the ounce. The patient now says she never felt better in health.

The evidence is strong that, on ordinary diet, there is a tendency in this case to a persistent increase of the quantity of urine and of the sugar in it, but from a surgical point of view it is hardly possible that the result of the operation could have been more satisfactory. It would be unwise to lay too much stress upon a single observation, but patients with a large amount of sugar in the urine requiring major operations are not very common, and this case would encourage the undertaking of surgical treatment in others if the circumstances seemed to demand it.

REFERENCE.

¹ W. Alfred Nash, *Lancet*, November 1st, 1902, p. 1192; C. W. Mansell Moullin, *Lancet*, June 15th, 1907, p. 1645; Mayo Robson, *Lancet*, June 29th, 1907, and the *Montreal Medical Journal*, November, 1904.

SOME REMARKS ON THE IRISH POOR-LAW MEDICAL SERVICE.*

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ALMOST the first who called attention to the unfortunate position of the Irish Poor-law Service in a practical way was Sir William Thomson, C.B., who has laid its members under a deep and lasting obligation by the amount of time and trouble he so ungrudgingly devoted to their cause. Before him, however, the Branch had taken up the subject, and with the Royal Colleges, the Irish Medical Association, the Irish Graduates' Association, etc., formed deputations to chief secretaries and the Local Government Board where the view held by the former bodies was fully stated. Since then at least three presidents of our Branch have devoted their addresses to bringing forward the hardships of the dispensary medical officers and ably advocating the claims made on their behalf.

I think the actions of these representative members and bodies prove, if indeed proof is required, the need of a reform not only of the Poor-law Medical Service, but of the system as a whole, though it is only the medical department we have time briefly to consider.

DUTIES.

The Poor-law medical officers are so many—almost half the profession in Ireland—that anything affecting them affects the profession as a whole; and a feeling of discontent with their lot and dissatisfaction with the conditions under which their duties are carried out exists. The chief hardships seem to me to be (1) inadequacy of salary, and (2) want of superannuation.

What are a medical officer's duties, and how is he paid for performing them?

He attends his dispensary to afford medical relief to all "poor persons" coming there and presenting the "black ticket." When he gets the "red ticket" he must attend at the patient's house, and continue his visits until termination of the case. When necessary he orders medicines and medical and surgical requirements; each must be ordered on separate requisition forms, each made out in duplicate. He checks the supplies, cares for the instruments, and, unless he is fortunate enough to have the services of one of the 47 compounders allowed for the 1,197 dispensaries of Ireland, makes up all his own prescriptions.

He sends at least three samples of drugs for examination every quarter. He returns all empties, and is even expected to pack them himself.

He keeps a register of every patient attended, and sends the book monthly to guardians for inspection. He reports the hours and duration of his stay in each dispensary.

*An address delivered on February 29th at the annual meeting of the Leinster Branch.